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CLAIMS

1. A method of establishing communication over a data network between endpoint systems using a service system that can set up a communication session with an associated transport mechanism enabling the exchange of data between endpoint systems joined to the session by the service system; the method involving receiving a communication request at the service system and, on the basis of information associated with the request, processing the request by steps including:
- (a) - identifying, from a pool of current communication sessions, an appropriate session for the communication requested, and where no appropriate session currently exists, creating a new session;
- (b) - identifying, from a pool of available parties, a specific party and associated endpoint system to join the session identified or created in step (a).
2. A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system, said information associated with the communication request being information input by a party associated with an endpoint system generating the communication request.
3. A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system, said information associated with the communication request being information about a topic of interest to the party, the information being derived from the identity or content of information pages served to that party from an information page server.
4. A method according to claim 1, wherein the communication request is made by a party through an associated endpoint system and includes an identifier of that party, said information associated with the communication request being information obtained by the service system as a result of accessing a party-profile database using the party identifier.
5. A method according to claim 1, wherein a first endpoint system wishing to communicate with a second endpoint system appropriate to a target subject, sends a

communication request to the service system with information identifying itself and describing the target subject, the service system carrying out steps (a) and (b) to provide an appropriate communications session and identify an appropriate second endpoint system, the service system inviting the identified first and second endpoint systems into the
5 communication session.

6. A method according to claim 1, wherein the service system is associated with a contact center and the said pool of available parties is a pool of available customer service representatives.

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7. A method according to claim 1, wherein the service system in setting up a communication session creates a respective service-session functional entity which, when joining an endpoint system to the session, sends connection details of the transport mechanism associated with the communication session to the endpoint system or an
15 associated proxy, that endpoint system or its proxy then using the connection details to connect itself to the transport mechanism.

8. A method according to claim 7, wherein the service-session functional entity comprises a session instance with generic behaviour for adding and removing endpoint systems to the communication session and for recording the endpoint systems currently joined to the communication session, and an associated service instance with service-specific behaviour determining when the session instance is to add and remove endpoint systems.

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9. A method according to claim 1, wherein the service system in setting up a communication session creates a respective service-session functional entity that comprises a session instance with generic behaviour for adding and removing endpoint systems to the communication session and for recording the endpoint systems currently joined to the communication session, and an associated service instance with service-specific behaviour determining when the session instance is to add and remove endpoint systems.

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10. A method according to claim 1, wherein the transport mechanism associated with a communication session provides multiple data transfer channels, for different media types,

between endpoint systems joined to the communication session.

11. A method according to claim 10, wherein the endpoint systems include web browser functionality and the service system provides functionality, and the transport mechanism
5 provides channels, for at least two of the following:

- text chat ;
- follow-me page-push;
- packetized voice.

- 10 12. A method according to claim 7, wherein the transport mechanism associated with a communication session provides multiple data transfer channels, for different media types, between endpoint systems joined to the communication session, the connection details passed to an endpoint system, or its proxy, comprising details of the media channels associated with the communication session, and the endpoint system or its proxy using
15 these details to establish corresponding media channel connections to the transport mechanism.

13. A method according to claim 7, wherein the state of connection of an endpoint system to the transport mechanism is signalled to the session-service functional entity by leg
20 messages passed between a leg controller of the endpoint system or its proxy and a corresponding leg controller of the service-session functional entity.

14. A method according to claim 7, wherein an endpoint system to be joined to a communication session, or its proxy, already has connection functionality for joining and
25 participating in a communication session, the service-session functional entity of the communication session to which the endpoint system is to be joined inviting this endpoint system into the session by sending said connection details to the connection functionality of the system or its proxy.

- 30 15. A method according to claim 7, wherein the service-session functional entity of the communication session to which an endpoint system is to be joined, invites this system into the session by sending the latter both connection functionality for joining and

participating in a communication session, and said connection details.

16. A method according to claim 14, wherein the connection details and functionality are sent in association with a web page served by the service system.

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17. A service system comprising

- a session entity for establishing communication sessions and controlling the joining of endpoint entities to each such session;
- a transport entity for establishing a transport mechanism for each session established by the session entity, the transport mechanism allowing the exchange of data across a network between endpoint entities joined to the session; and
- request-handling means for receiving and processing a communication request to join a requesting endpoint entity into an appropriate session with another endpoint entity on the basis of information associated with the request, the request-handling means including:
 - session-routing means for identifying, from a pool of current communication sessions, an appropriate session for the communication requested, and where no appropriate session currently exists, creating a new session; and
 - participant-routing means for identifying, from a pool of available parties, a specific party and associated endpoint system to join the session identified or created by the session-routing means.

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18. A system according to claim 17, wherein the said information associated with the communication request is information input by a party associated with an endpoint system generating the communication request, the request-handling means including means for extracting this information from the request.

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19. A system according to claim 17, wherein the said information associated with the communication request is information about a topic of interest to a party, the service system including means for deriving this information from the identity or content of information pages served to that party from an information page server.

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20. A system according to claim 17, wherein the communication request is made by a party through an associated endpoint system and includes an identifier of that party, the service system including a party-profile database and said information associated with the communication request being information obtained by the service system as a result of
5 accessing the party-profile database using the party identifier.

21. A contact center including a service system according to claim 17 , the said pool of available parties being a pool of available customer service representatives.

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